

ABSTRACT OF THE DISCLOSURE

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METHOD AND SYSTEM TO ALLEVIATE
DENIAL-OF-SERVICE CONDITIONS ON A SERVER

10 A method is presented for processing data in a
multithreaded application to alleviate impaired or
substandard performance conditions. Work items that are
pending processing by the multithreaded application are
placed into a data structure. The work items are
15 processed by a plurality of threads within the
multithreaded application in accordance with a first
algorithm, e.g., first-in first-out (FIFO). A thread
within the multithreaded application is configured apart
from the plurality of threads such that it processes work
items in accordance with a second algorithm that differs
20 from the first algorithm, thereby avoiding the impairing
condition. For example, the thread may process a pending
work item only if it has a particular characteristic.
The thread restricts its own processing of work items by
intermittently evaluating workflow conditions for the
25 plurality of threads; if the workflow conditions improve
or are unimpaired, then the thread does not process any
work items.